REPORT TO THE CHICAGO AREA RADIO CLUB COUNCIL AND AFFILIATED CLUBS
RELATIVE TO THE EMERGENCY FIELD DAY CONTEST.

The following report of activities at the key station at Belmont Harbor is respectfully submitted in the hope that it will evoke constructive criticism and suggestions from competing clubs to the end that future activities of this nature may be conducted in a more efficient and effective manner.

The key control station (W9TLQ portable) was operated on phone on a frequency of 1887 kc. with 400 watts input. Eight receivers were tuned to the transmitting frequencies of the eight competing clubs. One operator at the key station did nothing but operate the transmitter. Another operator devoted his entire time to keeping a log of all transmissions. The key station transmitter was on the air a total of 162 times during the period between 9 A.M. and 5 P.M.

One of the principle difficulties encountered was due to the fact that some of the competing stations were operating on 160 meters-the same as the key station transmitter. The monitoring receivers on these 160 meter field stations were located directly under the transmitting antenna at the key station. This made it necessary for the operators monitoring the 160 meter band to be warned each time before the transmitter was thrown on in order for them to switch their receivers to the stand-by position and after the transmission to be advised that it was again okeh for them to turn their receivers on. This resulted in considerable loss of time. It also resulted in necessitating "repeats" in a number of instances where 160 meter stations were sending a message to the key station and a portion of this message would be lost to the monitoring operator at the key station due to his having to throw off his receiver when the key station transmitter went on.

In future emergency operations it is our suggestion that the key station transmitter come on the air on the even quarter hour. During the preceeding fifteen minutes the field stations may send messages to the key station to be replied to on the next quarter hour transmission of the key station. No acknowledgment of receipt of these messages will be given under these conditions as the key transmitter must remain silent except on the quarter hour period. An alternative would be therefore, no stations on 160 except the key station. This would permit an okeh being given by the key station at any time irrespective of the regular quarter hour schedule. In this case, however, there is a possibility of interference by the key station transmitter with the receivers at the key station which are tuned in close harmonic relationship with the key station frequency.

It is suggested that slips mimeographed or printed with the essential heading be supplied to the operators monitoring the various field transmitters and there should be sufficient space allowed on this slip also to contain a short message covering the reply of the key station. These slips can then be passed over to the key station transmitter operator as fast as they are received by the monitors and the necessary information in reply written thereon by the judges.

It is further suggested that under the #1 procedure given above, field stations be permitted to shift frequency only on the quarter hour. Under procedure #2, frequencies can be changed at any time. We suggest however that field transmitters avoid changing frequencies as much as

possible as it necessarily means delay in relocating the station by the monitor as well as loss of operating time by the field transmitter.

It is further suggested that the matter of changing location and setting up the transmitter at a point not less than one mile away be given a very prominent part in future activities of this type. The ability to promptly change location and again set-up and resume operations offers a very definite indication of the flexibility and portability of the equipment as well as the efficiency of the operating crew.

Another necessary activity which was not incorporated in this recent field day, due to conditions, is the origination by the key station of messages to be relayed throughout the entire chain of field stations.

A very definite system of credits and penalties should be originated and strictly adhered to in future field days. It is also advisable that each competing club supply the key station with a monitoring operator, proficient in copying c.w., in order that all clubs may have an equally active part in the operation of the key station. In addition at least two relief operators should be supplied by the two largest clubs or such other clubs as may be able to supply them.

Competing field stations should avoid calling the key station unnecessarily with such questions as --- "how is my quality? --- what is my signal strength? --- am I being QRM'd? --- and if so shall I change my frequency?". Questions such as these can be answered by contacting other stations.

It is earnestly requested that all clubs who have participated in this last field day or clubs whose intention it is to enter future contests of this nature, send in their recommendations or suggestions at once for the betterment of future field days. These suggestions will then be condensed and submitted to a committee to draw up definite and final rules for future EMERGENCY FIELD CONTESTS. Attached herewith you will find condensed reports of the various competing clubs in this last contest.

THIS IS AN INTERCLUB ACTIVITY OF THE CHICAGO AREA RADIO CLUB COUNCIL

Respectfully submitted this 15 day
of November, 1939

Al Knodell W9TLR - Chairman
Interclub Activities Committee
Chicago Area Radio Club Council

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Suggestions, comments, criticisms, and recommendations of the first CARCC Emergency Field Day, submitted by participating clubs.

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Chicago Radio Traffic Association

"Prompt and individual replies to all calls. Proper ARRL message form, including number, ck, etc. Use independent transmitter for 40 meters, there being no reason it should run continuously, and contacts could be shortened very much. Don't call all stations so often. No particular advantage was noticed in having a 48 hour notice. A weeks notice so that members don't have to worry what date it is going to be seems much better. Have more contacts betwen participants. Have an alternate control station so that if net control, is covered by QRM as it was, or breaks down, the net members will have another station to turn to."

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Austin Radio Club

"Devote all operating time to the handling or relaying of messages instead of outside communicating. Limit field stations to one frequency. Hold these field tests several times a year. The gang had a good time and feel more sure of the equipment and operating conditions on the field

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Illinois Ham Club

"We suggest that if and when future emergency Field Days are held that each unit in the field have one transmitter and one receiver to contact the net control station. Each unit can have one or more transmitters to operate on other bands if desired, but should preferably use the QRR bands as designated by the ARRL.

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Hamfesters Radio Club

"Each group should work out a plan to notify other members of the group quickly. Each operator should be well acquainted with the xmtr and recvr used. In fact he should be well acquainted with all equipment in the group. Each operator should be well acquainted with the rules (in case of a contest). Have drills or tests for operators and equipment. Be sure equipment is in good repair. Have spare equipment. Have a key station for each band, or some method to expedite giving instructions and field stations contacting key station. Greater cooperation from other stations on or near key station frequency. In a real emergency this should not be a source of trouble. In this contest, it is my opinion that there were plenty of operators and equipment available, but that the lack of knowing just what to do, and how to do it, on the part of the operators, both in the field, and at the key station, showed just how unprepared for emergency we really are."

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York Radio Club

York Radio Club suggest that the monitoring receivers be located some distance away from the transmitter and communication between the two points be carried on via 5 meters. This would eliminate the blanketing effect felt on both 160 and 80 which existed when the 160 key station was on. Other than this suggestion they felt that the rules as originally developed were adequate providing they were followed out.

## Illinois Ham Club -- W9SG

Transmitters were operated on 1953-7016-7296 and 28,600 kc.
Locations used were Niles Center and Deerfield.
Antenna used on 160 meters was 160 ft. single wire direct from the transmitter--on 40 meters 128 ft. single wire direct from transmitter--on 10 meters two half waves in phase were used. Average heighth of antenna except for 10 meters was approximately 40 ft. above ground.
Power input to final was as follows: 160 meters--25 watts to an 807. 40 meters--20 watts to an 6L6. 10 meters--25 watts to an RK34. Power was obtained by gas driven generators.
14 club members were present at field stations.
5 receivers were used at various times as follows: 2 National 101x - 1 Hallicrafter Sky-Buddy - 1 Hallicrafter Commercial - 1 Hallicrafter 5 and 10. Total contacts - 10.

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## Austin Radio Club -- WOLTC

Frequencies used - 7005 and 7179 kc.
Locations-1 mile north of Maywood on west bank of the Des Plaines River 2nd. Location-2 miles north of 1st position on west bank of the Des Plaines River.
Antenna-66 ft. end-fed Hertz. Heighth at first location 5 ft., at second location 8 ft.
Transmitter-a 6L6 crystal oscillator and a T20 power amplifier with 30 watts input to the plate. Power was supplied by a 500 watt 110 volt A.C. generator driven by a one H.P. Briggs and Stratten gas engine.
Receivers - 1 Hallicrafter Sky-Rider - 1 Hallicrafter Sky-Challenger.
5 members of the club were present at the field station. Total contacts - 16.

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## Northwest Radio Club -- W9GTM

Frequency used - 7188 kc.
First location - Camp Reinberg near Palatine, Illinois - approximately 20 miles northwest of key station.
Transmitter consisted of 6V6 oscillator and 6L6 amplifier with 22 watts input.
First antenna was 80 meter fundamental with 33 ft. feeders on east end and at an approximate heighth of 20 ft. With this antenna stations in Ohio and Minnesota were raised but contact could not be made with key station. At 11 o'clock antenna was changed to two half wave center-fed with center 5 ft. above ground and the two ends 10 ft. above ground. Direction - Southwest and Northeast. Upon calling key station they promptly came back and reported us an R9. With this antenna we worked local stations we were unable to reach with the first antenna. Upon being instructed to move we moved 1.7 miles further into the forest preserve to a location not as open as the original one. The last named antenna was installed running north and south. Upon reporting to the key station they picked us up immediately but we were unable to raise stations east and west. The antenna was then changed to an east-west direction which had no appreciable effect on the signals received at the key station.
The power supply used during test was a gasoline motor driven 250 watt A.C. generator. Total contacts - 9

## Chicago Radio Traffic Association -- W9TXU

Frequencies used - 1926 and 7028 kc. c.w.
First location was at 76th ct. and Bloomingdale Rd., Elmwood Park.
Second location was Fullerton Woods East, approximately 2 miles northwest of first location.
Antenna's-On the c.w. transmitter an end-fed 66 ft. antenna was used with the feed end 5 ft. above the ground and the far end 20 ft. On 160 phone an end-fed 133 ft. antenna with the feed end 2 ft. high and the far end 20 ft. high was used.
Power-On c.w. power input was 10 watts and on phone 3½ watts. Final amplifier tube in the c.w. rig was a 6L6 and on the phone rig a 6A4.
Receivers-2 home brew receivers were used - one a superhet and the other a regenerative. Vibrapack power operated from 6 volt batteries were used on the supplies transmitters and one receiver. The other receiver - a nine tube superhet was battery operated. Total contacts - 5.

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## York Radio Club -- W9TGB

Frequencies - 7100-7200-1960 and 7275 kc.
Locations - Montrose and Fairview and Ridgeland and North Avenue, Elmhurst, Illinois.
Antenna - Half wave doublet-twisted pair of feeders 25 ft. above ground.
22 watts input to single RCA 807 in final.
Power supply 110 volt A.C. (gasoline driven generator).
Number of members at field station - 7. Two receivers used - both HRO.
Contacts made 35 (4 duplications) - net 31.

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## Hamfesters Radio Club -- W9TFA

Frequencies - 3597-1873-1995.
Location - 67th Street and S. Crawford Ave. 3900 W. on 57th Place.
Antenna - Original antenna 66 ft. long, 40 ft. at one end and 10 ft. at the other end. End-fed. Second antenna 264 feet long-horizontal - 40 ft. high.
Transmitter - 6C5 xtal. osc. 6L6 amp. 6N7 speech-6N7 class B. 12 watts input on phone-20 watts on CW.
Power source-rewound Dodge generator powered by ½ hp. Briggs Stratton engine. 3KW. Generator driven by Ford engine. Vibrator pack from storage battery.
Receivers - Sky Buddy and Sky Challenger. Members present at Field Station - 8.

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## Tri-Town Radio Club -- WOMWJ

Frequencies - 3525-7046 KC.
Antenna - 160 meter end fed.
Transmitter - 6L6-6L6.
Power Input - 20 watts.
Power Supply - 6 volt battery and Vibrapack-Onan 350 watt gas driven gen
Receivers - Hallicrafter SX 16-Challenger-Ultra Skyrider.
Members present - 5. Total contacts - 2.

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## Chicago Suburban Radio Ass'N -- W9PNV

(No report)

## Chicago Suburban Radio Association

During the recent emergency contest, the C.S.R.A. was a participant. However, much of the "gusto" was taken out of the emergency, because contacts could not be made with the key station at the allotted time, and permission could not be received to change frequency. One point should be made clear; each station should have its own time for contacting the key station, and they should listen for instructions at that time. The key station should avoid wasting too much time on its contacts, and instructions should be up to the minute.

On the other hand the contest was enjoyed by all, and the club intends to make the next one a bigger and better success.